

TWO NEW SPECIES OF DAPHNIPHYLLUM

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ABSTRACT

Daphniphyllum woodsonianum from Sumatra and *D. philippinense* from Luzon are described as new. The former is similar to *D. glaucescens* subsp. *scortechinii* (based on *D. scortechinii* Hook. f.) while the latter resembles *D. glaucescens* subsp. *borneense* (based on *D. borneense* Stapf).

Daphniphyllum woodsonianum Huang, sp. nov.—Fig. 1.

Folia verticillata vel subverticillata, subsessilia; lamina obovata, oblongo-ovata vel oblongo-obovata, coriacea, venis 7-9. *Inflorescentia* racemiformia. *Flos* masculus sine calyce vel calyce cupuliformi (?) *flos* femineus cum calyce. *Stamina* 8-11, filamentis longissimis, antheris elliptico-ovatis, apice triangularibus. *Ovarium* ovatum; stigma brevissima.

Shrubs or *trees*, the branchlets round, canaliculate, reddish-brown, the lenticels elliptic, elevate. *Leaves* verticillate or subverticillate, the petioles broadly triangular, very short, thickened at the base, 2 mm long and wide; blades obovate, oblong-ovate to oblong-obovate, the base obtuse, the apex rounded, rarely emarginate to mucronulate, the margins entire, 4-7 cm long, 2.5-4.5 cm wide, coriaceous, shining, smooth, brown on both surfaces, the lateral veins 7-9, thin, elevate-reticulate beneath. *Staminate inflorescences* oblong, 1.5-3 cm long, 0.2 mm wide, the pedicels oblong, 4-7 mm long, 0.1 mm wide; calyx absent or very shallowly cupuliform; stamens 8-11, the filaments oblong, 1.3-2.3 mm long, 0.1 mm wide, the anthers elliptic-ovate, 0.6-0.8 mm long, 0.4-0.5 mm wide, the triangular apex 0.2 mm long and wide. *Pistillate inflorescences* angulate, ca 2.5 cm long, 0.8 mm wide, the pedicels flat, 2-3 mm long, 0.1 mm wide; calyx oblong or obovate-oblong, subentire or with an irregularly divided apex, caducous, 0.4 mm long, 0.3 mm wide; ovary ovate, the stigma short, radiate or revolute.

INDONESIA. N. SUMATRA: Gaju & Alas lands, Paetjoeh Augasan, Aivonac, ridge forest alt 2500 m, *van Steenis* 8362 (L, holotype; BO, K, isotypes?), mountain shrubs, alt 2950-3500 m, *van Steenis* 8654 (BO, L).

Since both staminate (Kew & Bogor specimens) and pistillate (Leiden specimen) plants were collected by van Steenis under the same number (8362), possibly more than one tree was involved, perhaps the species is monoecious, or less likely the specimens were mislabelled.

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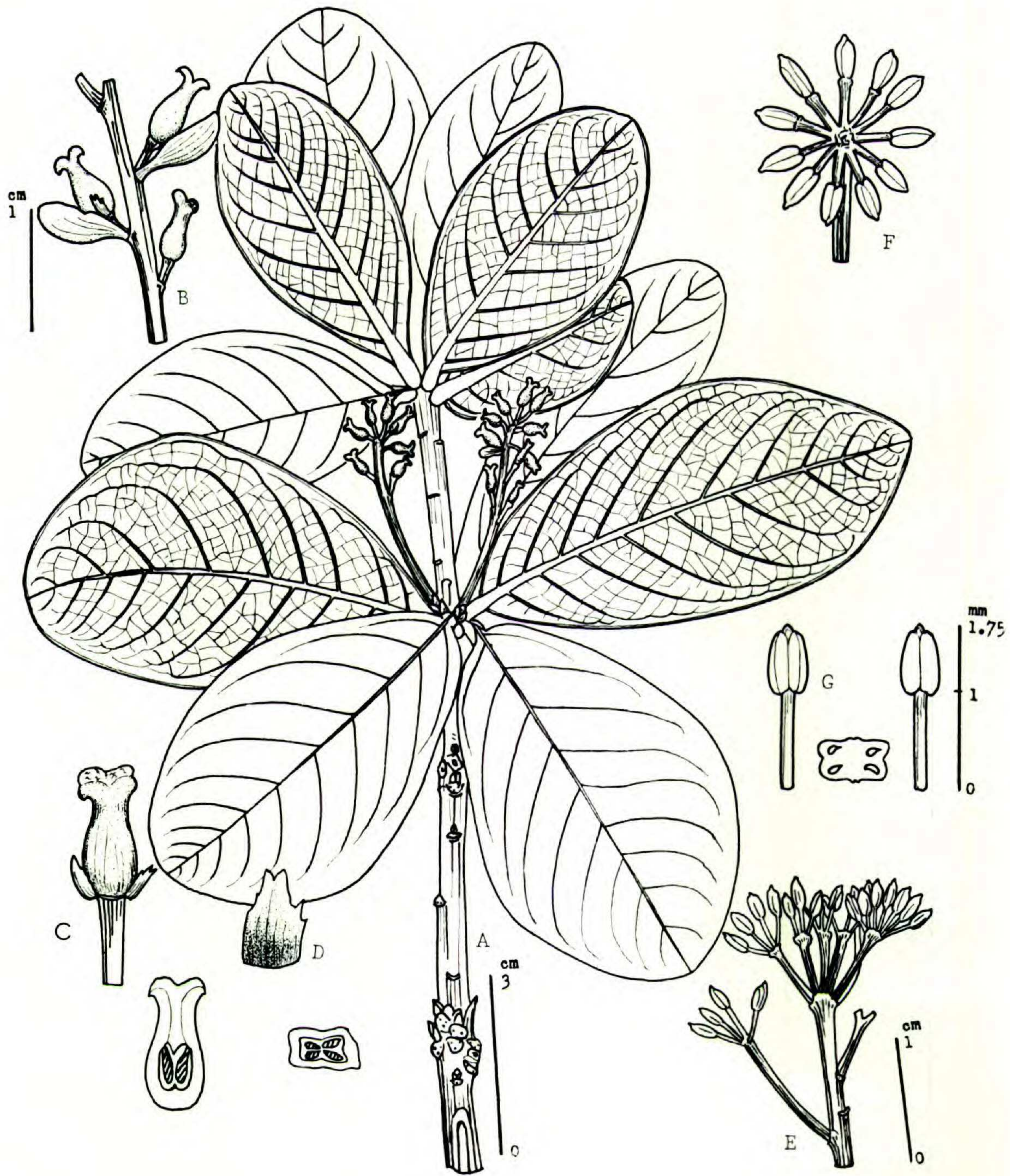


Fig. 1. *Daphniphyllum woodsonianum* Huang. A: Twig with pistillate flowers (*van Steenis* 8362, L); B: Portion of a pistillate inflorescence (*van Steenis* 8362, L); C: Ovary and longitudinal and cross sections of the ovary (*van Steenis* 8362, L); D: Calyx (*van Steenis* 8362, L); E: Staminate inflorescence (*van Steenis* 8362, K); F: Naked staminate flower (*van Steenis* 8362, K); G: Stamen, dorsal and ventral views, and anthers in cross section (*van Steenis* 8362, K).



Fig. 2. *Daphniphyllum philippinense* Huang. A: Twig with naked staminate flowers (Curran et al. 18357, US); B: Naked staminate flower (Curran et al. 18357, US); C: Stamens showing apiculate and emarginate apices and anthers in cross section (Curran et al. 18357, US); D: Smooth fruit with divaricate styles, staminodia scars and calyx scars, longitudinal section, and a seed (Ramos 23478, F); E: Tuberculate fruit with revolute styles, staminodia scars, longitudinal section, and a seed (Merrill 1748, GH).

The texture and shape of leaves of *D. woodsonianum* is very similar to those of *D. glaucescens* subsp. **scortechinii** (Hook. f.) Huang, stat. nov. (*D. scortechinii* Hook. f., Fl. Brit. Ind. **5**: 354, 1887), except for the subsessile and subverticillate arrangement of leaves. In addition, the former differs from the latter by the absence of a calyx in staminate flowers.

The new species is named after the late Dr. R. E. Woodson, Jr.

Daphniphyllum philippinense Huang, sp. nov.—Fig. 2.

Folia fasciculata, petiolata; lamina anguste angulato-ovata, coriacea, venis 7-9. *Inflorescentia* racemiformia. *Flos* masculus sine calyce flos femineus sine calyce (?) vel calyce caduco. *Stamina* 5-11, antheris oblongis vel oblongo-ellipticis apiculatis. *Drupa* ellipsoidea vel elliptico-globosa, glabra vel tuberculata; stigma divaricata. *Semina* elliptico-globosa glabraque.

Shrubs or trees, the branchlets round, gray-brown, the lenticels elliptic, rather large, prominent. *Leaves* fasciculate, the petioles triangular, sulcate above, 2-4 cm long, 1.5 mm wide; blades narrowly angular-ovate, the base attenuate, the apex acute or obtuse, the margins revolute, 9-13 cm long, 3-4.5 cm wide, coriaceous, shining, pale green on both surfaces, the veins 7-9, thin, slightly prominent on both surfaces. *Staminate inflorescences* racemiform, flat, ca 3 cm long, 0.1 mm wide, the pedicels 4-7 mm long, 0.1 mm wide, calyx absent; stamens 5-7(-11), the filaments 0.2-0.4 mm long, 0.1 mm wide, the anthers oblong or oblong-elliptic, 0.7-0.8 mm long, 0.5 mm wide, apiculate. *Fruiting axes* racemiform, angulate, 3-8.5 cm long, 1 mm wide, the pedicels angulate, 1-2.5 cm long, 1 mm wide, calyx absent or caducous; staminodia scars and calyx scars (?) prominent in 1-2 whorls; drupes ellipsoidal, elliptic-globose, 10-15 mm long, 6-8 mm in diam, smooth or tuberculate, black, the stigma divaricate. *Seeds* elliptic-globose, smooth, 7 mm long, 5 mm in diam.

PHILIPPINES. LUZON: Benque, Mt Pulog, Curran, Merritt & Zachokke 18357 (US, holotype), Merrill 1748 (BM, BO, GH, L, MO, NY); Mancayan to Gaguio, Ramos & Edano 40478 (A, K, L, US); Camarines, Ramos 1503 (BM, BO, GH, L, MO, NY); Leyte, Dagami, Ramos 15235 (BM, K, US); Sorsogon, Ramos 23478 (A, BM, BO, F, K, L, MO, NY, US).

This new species is related to and perhaps evolved from *D. glaucescens* subsp. **borneense** (Stapf) Huang, stat. nov. (*D. borneense* Stapf, Trans. Linn. Soc., Ser. 2, **4**: 224, 1894) because of their similar leaves and their smooth, ellipsoidal or elliptic-globose drupes. Two different types of fruiting specimens are assigned to this new species for it is not definitely known which type belongs here. The one type (Merrill 1748) has ellipsoidal, tuberculate drupes with prominent staminodial scars while the other type (Ramos 23478) has ellipsoidal, smooth, drupes with a prominent calyx and staminodial scars.